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Before the Federal Communications Commission Washington, D.C. 20554

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To: Chief, Allocations Branch, Mass Media Bureau

JOINT PETITION FOR RULE MAKING

Imagine Television ("ITV") and Marri Broadcasting, L.P. ("Marri") (collectively "Petitioners"), by their attorneys, and pursuant to Section 1.401 of the Commission's rules and its *Public Notice*, DA 99-2605 (released November 22, 1999) ("Mass Media Bureau Announces Window Filing Opportunity for Certain Pending Applications and Allotment Petitions for New Analog TV Stations") ("*Window Filing Notice*"), hereby request that the Commission institute a rule making proceeding for the purpose of (i) amending the NTSC TV Table of Allotments to delete Channel 59- at Vineland, New Jersey, and (ii) amending the DTV Table of Allotments to add Channel 24 at Vineland, New Jersey.

On March 9, 2000, The Commission extended the window filing period until July 15, 2000. See Public Notice, 15 FCC Red 4974 (2000) ("Window Filing Opportunity for Certain Pending Applications and Allotment Petitions for New Analog TV Stations Extended to July 15, 2000").

Accordingly, Petitioners propose to amend Section 73.606(b) of the Commission's rules as follows:

Channel No.

| City | Present | Proposed |
|----------------------|----------|----------|
| Vineland, New Jersey | 59-, 65- | 65- |

Petitioners also propose to amend Section 73.622(b) of the Rules as follows:

Channel No.

| City | Present | Proposed |
|----------------------|---------|----------|
| Vineland, New Jersey | | 24 |

ITV and Marri currently have competing applications pending for a new NTSC television station to operate on Channel 59- at Vineland, New Jersey (File Nos. BPCT-960920YV and BPCT-960920LO, respectively). As is indicated in the attached engineering statement, Channel 59- at Vineland would cause impermissible interference to WBPH-DT, Channel 59, Bethlehem, Pennsylvania; accordingly, the instant petition is properly submitted pursuant to the *Window Filing Notice*.

As demonstrated by the attached engineering statement, the proposed addition of DTV Channel 24 at Vineland meets all allocation criteria specified in the Commission's rules and in the above-referenced *Public Notice*. Further, the *Public Notice* expressly authorizes petitioners to request a DTV channel in lieu of an NTSC channel.

In the event DTV Channel 24 is allotted to Vineland, Petitioners will amend their pending applications in accordance with the Report and Order issued in this proceeding to

While Petitioners do not believe that such a waiver is necessary, out of an abundance of caution waiver is requested of any interference in excess of the 0.5% "rounding factor" to WNYE-DT, Channel 24, New York, New York (the interference to WNYE-DT is calculated to be 0.6%). Petitioners would not object to a condition attached to the requested DTV allotment to the effect that radiation must be limited to a specified value in the direction of WNYE-DT.

specify the new channel, and will modify their technical proposals as necessary so that their proposed facilities will meet all applicable allotment criteria. In the event its application is granted, ITV or Marri, as the case may be, will timely construct the facilities authorized.

For the reasons stated, Petitioners respectfully request that the Commission GRANT this petition for rule making, AMEND the NTSC Table of Allotments by deleting Channel 59- at Vineland, New Jersey, and AMEND the DTV Table of Allotments by adding DTV Channel 24 at Vineland, New Jersey.

Respectfully submitted,

IMAGINE TELEVISION

July 17, 2000

Cohn & Marks 1920 N St., NW Suite 300 Washington, DC 20036 (202)293-3860

MARRI BROADCASTING, L.P.

John 🗗 Fiorini III

Its Attorney

July 17, 2000

Gardner, Carton & Douglas 1301 K Street, N.W. Suite 900, East Tower Washington, D.C. 20005-3317 (202)408-7159 By:

ENGINEERING STATEMENT PREPARED IN SUPPORT OF PETITION FOR RULEMAKING

AMENDMENT OF SECTION 73.622(b)

TABLE OF ALLOTMENTS

DELETE NTSC CHANNEL 59- VINELAND, NEW JERSEY 73.606(b)

ADD DTV CHANNEL 24 VINELAND, NEW JERSEY 73.622(b)

ENGINEERING STATEMENT PREPARED IN SUPPORT OF

PETITION FOR RULEMAKING

AMENDMENT OF SECTION 73.622(b)

TABLE OF ALLOTMENTS

DELETE NTSC CHANNEL 59- VINELAND, NEW JERSEY 73.606(b) ADD DTV CHANNEL 24 VINELAND, NEW JERSEY 73.622(b)

JUNE 2000

SUMMARY

The following engineering statement has been prepared on behalf of Imagine Television ("ITV") and Marri

Broadcasting, L.P. ("Marri"), mutually exclusive applicants for a new NTSC full service television station

to operate on Channel 59-, Vineland, New Jersey. The pending applications' file numbers are BPCT-

960920YV and BPCT-960920LO, respectively. This Petition is filed in response to FCC Public Notice DA

99-2605, "Mass Media Bureau Announces Window Filing Opportunity For Certain Pending Applications And

Allotment Petitions For New Analog TV Stations", released November 22, 1999 and in accordance with the

alternative amendment options offered therein. The applicants request that the NTSC Table of Allotments,

Section 73.606(b), be amended to delete Channel 59- at Vineland, New Jersey and that the DTV Table of

Allotments, Section 73.622(b), be amended to add Channel 24 at Vineland, New Jersey.

The pending ITV Channel 59 application has been analyzed using the OET-69 methodology and found to cause

unmasked interference to WBPH-DT, Channel 59, Bethlehem, Pennsylvania in excess of 50% of the WBPH

Grade B population. The pending Marri Channel 59 application has also been analyzed and was found to

cause unmasked interference to WBPH-DT, Channel 59, in excess of 37% of the WBPH Grade B population.

These levels of interference far exceed the allowable value and form a basis for the filing of the instant Petition

for Rulemaking.

This engineering statement is complete with the following:

Table I.

Summary of initial television allocation study data.

Table II.

DTV interference study.

Table III.

Horizontal plane radiation pattern tabulation, PSI LPD16AH/24.

Table IV. Elevation pattern tabulation, PSI LPD16AH/24.

Table V. HAAT and distance to contour data for proposed Channel 24 DTV facility.

Figure 1. Comparison of pending NTSC 64 dBu and NTSC service areas.

Figure 2. Vertical plan sketch.

Figure 3. F(50,90) 41 dBu predicted DTV service contours.

Figure 4. PSI LPD16AH/24 horizontal plane radiation pattern.

Figure 5. PSI LPD16AH/24 elevation pattern.

Figure 6. LPTV allocation mapping.

Figure 7. LPTV allocation mapping - W24BB with 6 dB receive antenna directivity factor applied.

The requested change in the Table of Allotments can be made in full conformance with the FCC Rules and the DTV channel change will permit the introduction of a new, second TV service to Vineland, New Jersey.

It is noted that the November 22, 1999 Notice is not 100% clear concerning 0.5% rounding interference nor 2% de minimis interference for DTV. In an abundance of caution, the petitioners herein request a waiver for any interference caused in excess of the 0.5% rounding factor to WNYE(DT) Channel 24, New York, New York. A modified horizontal plane radiation pattern can be proposed, if required, but such a proposal is to be avoided, if possible, at the Rulemaking stage. The petitioners would not object to a condition in the DTV allotment that radiation be limited to a specified value in the direction of the WNYE final approved service area.

BACKGROUND

ITV's and Marri's pending TV applications propose different sites and overlapping service areas as seen on *Figure 1*, attached. The proposed DTV allotment specifies the currently proposed Marri site and RC AMSL. The directional antenna pattern and ERP have been chosen to duplicate as much of the originally proposed NTSC service areas as possible while meeting all FCC DTV interference protection criteria to existing NTSC

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stations and DTV allotments. The predicted Channel 24 DTV 41 dBu F(50,90) contour is also depicted on

Figure 1.

It is noted that the proposed site is believed to be the best location for the proposed Vineland, New Jersey TV

station in terms of viewer compatibility. The only other Vineland TV station, WHSP-TV, Channel 65, is

located 0.8 kM from the proposed site, allowing TV viewers with outside receiving antennas to set their

antennas for the same orientation for both stations as well as co-located WPSJ-LP, Channel 8, Hammonton,

New Jersey and WNJS, Channel 23, Camden, New Jersey.

Figure 2 is a vertical plan sketch for the proposed Channel 24 DTV facility.

ALLOCATION CONSIDERATIONS - FULL SERVICE

No VHF TV channel is available for full service operation to the community of Vineland, New Jersey nor for

the proposed service area. <u>Table I</u> is an allocation summary of UHF Channels 14-51. Channel 24, the channel

proposed herein, is believed to be the only viable "in-core" channel for use by the applicants at Vineland, New

Jersey.

The requested allocation of DTV Channel 24 is summarized as follows:

Coordinates:

N.L. 39° 43' 41"

(NAD 27)

W.L. 74° 50' 39"

Radiation Center:

269 M AMSL

HAAT:

244 meters

ERP:

100 kW MAX. (DA)

Antenna:

Horizontal polarization

PSI LPD16AH/24

0.5 degree beam tilt

Tower Registration:

1045125

The requested substitution of DTV Channel 24 for NTSC Channel 59- at Vineland, New Jersey complies fully with the de minimis interference criteria of Section 73.623(c)(2) of the FCC Rules. An analysis of the

proposed DTV allotment has been conducted employing the methodology described in FCC Office of Engineering Technology ("OET"), Bulletin No. 69 "Longley-Rice Methodology for Evaluating TV Coverage and Interference" as implemented on the time share system at NTIA /ITS, Boulder, Colorado. Results have been compared with output from ComStudy V 2.2, DTV Allocation Study Module. Outputs from both programs were found to be in close agreement with each other as well as published FCC allotment data for the stations studied. *Table II* is a tabulation of all stations studied with a detailed interference analysis for the four stations to which the proposed facility will cause de minimis interference.

ALLOCATION CONSIDERATIONS - LPTV

The Report and Order in MM Docket No. 00-10, "Establishment of a Class A Television Service", released April 4, 2000, has been evaluated for its impact on the proposal herein. LPTV stations which have been considered for protection are listed below:

| Call <u>Sign</u> | <u>Channel</u> | City/ <u>State</u> | Distance - Kilometers | Bearing Degrees | Included in 6-2-2000 Certification List |
|---------------------|----------------|-----------------------|-----------------------|--------------------|---|
| W23BA | 23 | E. Orange, NJ | 129.7 | 23.1 | No |
| W23AZ | 23 | Hackettstown, NJ | 124.8 | 358.7 | No |
| | | | | | |
| Call <u>Sign</u> | Channel | City/ State | Distance - Kilometers | Bearing Degrees | Included in 6-2-2000 Certification List |
| W23AY | 23 | York, PA | 160.5 | 278.5 | No |
| WEWE-LP | 24 | Sussex, DE | 134.6 | 194.1 | Yes |
| W59DH | 24 | Cherry Hill, NJ | 0 | 0 | No |
| W24BB | 24 | E. Stroudsburg, PA | 154.7 | 338.7 | Yes |
| W24BL | 24 | Pottsville, PA | 156.4 | 312.4 | No |
| W59CC | 24 | Reading, PA | 113.7 | 307.7 | No |
| W25BB | 25 | Pittstown, NJ | 87.4 | 353.6 | No |
| W25AW | 25 | Trenton, NJ | 58.6 | 10.9 | Yes |
| W27AJ | 27 | Dover, DE | 82.0 | 222.8 | No |
| WXTV-LP | 28 | Philadelphia, PA | 48.2 | 315.8 | Yes |
| W31BV | 31 | Atlantic City, NJ | 54.0 | 141.0 | No |
| W63CO | 28 | Philadelphia, PA | 49.9 | 317.4 | Yes |
| | | | | | |

The stations which require protection are listed below with the appropriate F(50,10) interfering contour requirement for the proposed Channel 24 DTV allotment:

| <u>Call</u> | Channel | City/State | <u>F(50,10)</u> |
|-------------|---------|--------------------|-----------------|
| WEWE-LP CH | 24 | Sussex, DE | 40 dBu |
| W24BB | CH 24 | E. Stroudsburg, PA | 40 dBu |
| W25AW | CH 25 | Trenton, NJ | 88 dBu |
| WXTV-LP | CH 28 | Philadelphia, PA | 99 dBu |
| W63CO | CH 28 | Philadelphia, PA | 99 dBu |

The 74 dBu contour for each LPTV station, along with the associated F(50,10) Channel 24 DTV interference contour, is plotted on map *Figure 6*. No prohibited contour overlap is associated with WEWE-LP, W25AW, WXTV-LP and W63CO. The remaining LPTV station to be addressed is W24BB.

Figure 7 depicts the W24BB 74 dBu F(50,50) contour, the proposed Vineland F(50,10) 40 dBu, and the WNYE-DT, Channel 24, New York, New York allotment 40 dBu contour. Section 73.623(c)(5)(iii) includes a provision for utilization of OET Bulletin No. 69 techniques. OET Bulletin 69 provides for a receive antenna front to back ratio of 6 dB. By examination of Figure 6, it is seen that the proposed interfering contour does not overlap the W24BB transmitter site. In light of OET Bulletin 69, since all reception of W24BB in the overlap area will occur off the back of receive antennas directed at W24BB, it is believed appropriate to increase the interfering contour to 46 dBu. The 46 dBu contour is depicted on Figure 7 and there is no prohibited overlap in this scenario.

In addition, out of abundance of caution, a waiver of the Class A protection Rule, set forth in Section 73.623(c)(5)(ii), is requested on the grounds that the area of prohibited overlap from the proposed Vineland channel is already subject to grandfathered overlap from WNYE-DT.

PRINCIPAL COMMUNITY COVERAGE

The proposed amendment to the Table of Allotments at Vineland, New Jersey complies fully with the principal community coverage requirements set forth in Section 73.625(a) of the FCC Rules. <u>Table III</u> is a tabulation

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of the proposed horizontal plane radiation pattern, while <u>Table IV</u> is a tabulation of the proposed antenna

elevation pattern. <u>Table V</u> is a tabulation of HAAT and distance to contour data for the proposed facility.

Figure 3 depicts the predicted F(50,90) 41 dBu contour with respect to the community of Vineland, New

Jersey.

CONCLUSION

The proposed substitution of DTV Channel 24 for NTSC Channel 59- can be made in full conformance with

applicable FCC Rules with the possible exception noted on page 2 herein. The requested change will allow

the community of Vineland, New Jersey to receive a new second local video service.

The foregoing was prepared on behalf of Imagine Television and Marri Broadcasting, L.P. by Clarence

M. Beverage of Communications Technologies, Inc., Marlton, New Jersey, whose qualifications are a matter

of record with the Federal Communications Commission. The statements herein are true and correct of his own

knowledge, except such statements made on information and belief, and as to these statements he believes them

to be true and correct.

Clarence M. Beverage

for Communications Technologies, Inc.
Marlton, New Jersey

SUBSCRIBED AND SWORN TO before me,

this 30th day of _____

. 2000.

Esther G. Sperheck

NOTARY PURI IC

ESTHER G. SPERBECK NOTARY PUBLIC OF NEW JERSEY

MY COMMISSION EXPIRES OCT. 15, 2002

TABLE I

SECTION 73.623(d) ALLOCATION STUDY SEARCH FOR DTV CHANNEL AS SUBSTITUTE FOR NTSC CH 59 VINELAND, NEW JERSEY

JUNE 2000

| | DYCELLOS IV | | | OPEN FOR FURTHER |
|--------------------|-----------------------------|--------|-----------------------------|---------------------|
| CHANNEL STUDIED | DISTANCE - K <u>REQ.</u> | ACTUAL | <u>COMMENTS</u> | STUDY |
| 14 | 250 | 134.7 | LM NY, CH 14 | No |
| 15 | 250 | 134.7 | LM NY, CH 15 | No |
| 16 | 12-106 | 48.6 | WPHL, CH 17, Phila., PA | No |
| 17 | 217.3 | 48.6 | WPHL, CH 17, Phila., PA | No |
| 18 | 12-106 | 48.6 | WPHL, CH 17, Phila., PA | No |
| 19 | 250 | 36.3 | LM Phil., CH 19 | No |
| 20 | 250 | 36.3 | LM Phil., CH 20 | No |
| 21 | 176 | 36.3 | LM Phil., CH 20 | No |
| 22 | 196.3 | 0 | WNJS-DT, CH 22, Camden, NJ | No No |
| 23 | 217.3 | 0 | WNJS, CH 23, Camden, NJ | No |
| * 24 | 24.1-80.5 | 48.6 | WPHL, CH 17, Phil., PA | Yes |
| | 12-106 | 0 | WNJS, CH 23 | Yes |
| | 217.3 | 285.1 | WEDH, CH 24, Hartford, CT | OK |
| | 217.3 | 171.9 | WUTB, CH 24, Baltimore, MD | Yes |
| | 196.3 | 134.8 | WNYE DT, CH 24, NY, NY | Yes |
| | 217.3 | 370.7 | WCNY, CH 24, Syracuse, NY | OK |
| | 196.3 | 320.6 | WATM-DT, CH 24, Altoona, P | A OK |
| | 12-106 | 134.8 | WNYE, CH 25, NY, NY | OK |
| | 24-110 | 99.0 | WTVE-DT, CH 25, Reading, PA | A Yes |
| | 24.1-80.5 | 48.4 | WTXF, CH 29, Phila., PA | Yes |
| 25 | 196.3 | 99.0 | WTVE-DT, CH 25, Reading, PA | A No |
| 26 | 196.3 | 48.8 | KYW-DT, CH 26, Phila., PA | No |
| 27 | 196.3 | 48.8 | WGTW-DT, CH 27, Burlington | , NJ No |

COMMUNICATIONS TECHNOLOGIES, INC. - BROADCAST ENGINEERING CONSULTANTS

TABLE I PAGE 2

SECTION 73.623(d) ALLOCATION STUDY SEARCH FOR DTV CHANNEL AS SUBSTITUTE FOR NTSC CH 59 VINELAND, NEW JERSEY

JUNE 2000

| CHANNEL STUDIED | DISTANCE - K <u>REQ.</u> | ILOMETERS <u>ACTUAL</u> | COMMENTS | OPEN FOR FURTHER STUDY |
|--------------------|-----------------------------|----------------------------|--------------------------------|------------------------------|
| 28 | 24.1-80.5 | 48.4 | WTXF, CH 29, Phila., PA | No |
| 29 | 217.3 | 48.4 | WTXF, CH 29, Phila., PA | No |
| 30 | 24.1-80.5 | 48.4 | WTXF, CH 29, Phila., PA | No |
| 31 | 196.3 | 39.1 | WPPX-DT, CH 31, Wilmington, Dl | E No |
| 32 | 24-110 | 39.1 | WPPX-DT, CH 31, Wilmington, Dl | E No |
| 33 | 24-110 | 48.4 | WYBE-DT, CH 34, Phila., PA | No |
| 34 | 196.3 | 48.4 | WYBE-DT, CH 34, Phila., PA | No |
| 35 | 217.3 | 48.4 | WYBE, CH 35, Phila., PA | No |
| 36 | 12-106 | 48.4 | WYBE, CH 35, Phila., PA | No |
| 38 | 196.3 | 161.4 | WJZ-DT, CH 38, Baltimore, MD | Yes |
| | 196.3 | 130.1 | WWOR-DT, CH 38, NY, NY | Yes |
| | 217.3 | 203.9 | WSWB, CH 38, Scranton, PA | Yes |
| | 12-106 | 105.8 | WLVT, CH 39, Allentown, PA | No 1 |
| 39 | 12-106 | 67.4 | WMGM, CH 40, Wildwood, NJ | No |
| 40 | 217.3 | 67.4 | WMGM, CH 40, Wildwood, NJ | No |
| 41 | 12-106 | 67.4 | WMGM, CH 40, Wildwood, NJ | No |
| 42 | 196.3 | 48.4 | WTXF-DT, CH 42, Phila., PA | No |
| 43 | 196.3 | 63.00 | WNJT-DT, CH 43, Trenton, NJ | No |
| 44 | 24-110 | 63.00 | WNJT-DT, CH 43, Trenton, NJ | No |
| 45 | 196.3 | 51.3 | WWAC-DT, Atlantic City, NJ | No |

TABLE I PAGE 3

SECTION 73.623(d) ALLOCATION STUDY SEARCH FOR DTV CHANNEL AS SUBSTITUTE FOR NTSC CH 59 VINELAND, NEW JERSEY PAGE 3

JUNE 2000

| CHANNEL STUDIED | DISTANCE - KII REQ. | LOMETERS ACTUAL | | OPEN FOR FURTHER STUDY_ |
|--------------------|------------------------|--------------------|----------------------------------|-------------------------------|
| | | - | | No No |
| 46 | 24-110 | 51.3 | WWAC-DT, Atlantic City, NJ | NO |
| 47 | 12-106 | 48.7 | WGTW, CH 48, Burlington, NJ | No |
| 48 | 217.3 | 48.7 | WGTW, CH 48, Burlington, NJ | No |
| 49 | 12-106 | 48.7 | WGTW, CH 48, Burlington, NJ | No |
| 50 | 196.3 | 23.5 | WWAC-DT, CH 50, Atlantic City, N | J No |
| 51 | 196.3 | 137.6 | WNJN-DT, CH 51, Montclair, NJ | No |
| | 217.3 | 99.0 | WTVE, CH 51, Reading, PA | No |

^{*} Channels 24 available for further study under Section 73.623(c) of the Rules.

NOTE: All distance and bearing computations are referenced to the proposed site coordinates located at:

N.L. 39° 43' 41" W.L. 74° 50' 39"

¹ Precluded due to predicted interference significantly above 2% de minimis value.

TABLE II

DTV INTERFERENCE STUDY PROPOSED CHANNEL 24 DTV 100 kW MAX. DA @ 244 METERS HAAT VINELAND, NEW JERSEY

JUNE 2000

| | IONS CONS <u>HANNEL</u> | SIDERED SERVICE | COMMUNITY OF LICENSE | DIST. <u>kM</u> | BEARING DEGREES |
|------|----------------------------|--------------------|-------------------------|--------------------|--------------------|
| WNJS | 23 | NTSC | Camden, NJ | 0 | 0 |
| WPHL | 17 | NTSC | Philadelphia, PA | 48.5 | 316.0 |
| WBIS | 31 | NTSC | New York, NY | 130.1 | 32.5 |
| WNYE | 25 | NTSC | New York, NY | 134.8 | 32.4 |
| WBOC | 16 | NTSC | Salisbury, MD | 152.5 | 207.1 |
| WCPB | 28 | NTSC | Salisbury, MD | 162.6 | 203.6 |
| WLIW | 21 | NTSC | Garden City, NY | 166.8 | 44.6 |
| WMPT | 22 | NTSC | Anapolis, MD | 171.4 | 242.8 |
| WHSW | 24 | NTSC | Baltimore, MD | 171.5 | 254.0 |
| WBRE | 28 | NTSC | Wilkes Barre, PA | 183.4 | 332.2 |
| WNEP | 16 | NTSC | Scranton, PA | 183.6 | 332.1 |
| WHP | 21 | NTSC | Harrisburg, PA | 185.5 | 292.4 |
| WDCA | 20 | NTSC | Washington, DC | 212.1 | 247.1 |
| WHMM | 32 | NTSC | Washington, DC | 212.1 | 247.1 |
| WTXX | 20 | NTSC | Waterbury, CT | 251.6 | 37.2 |
| WHAG | 25 | NTSC | Hagerstown, MD | 267.1 | 269.4 |
| WWPB | 31 | NTSC | Hagerstown, MD | 267.5 | 269.2 |
| WEDH | 24 | NTSC | Hartford, CT | 284.9 | 36.4 |
| WTWS | 26 | NTSC | New London, CT | 291.8 | 49.1 |
| WWLP | 22 | NTSC | Springfield, MA | 317.7 | 33.8 |
| WATM | 23 | NTSC | Altoona, PA | 319.7 | 288.1 |
| WXXA | 23 | NTSC | Albany, NY | 328.5 | 11.9 |
| WMHT | 17 | NTSC | Schenectady, NY | 330.9 | 12.0 |

TABLE II PAGE 2

| STAT CALL CH | IONS CONS <u>IANNEL</u> | IDERED SERVICE | COMMUNITY OF LICENSE | DIST. <u>kM</u> | BEARING DEGREES |
|-----------------|----------------------------|-------------------|-------------------------|--------------------|--------------------|
| WCVE | 23 | NTSC | Richmond, VA | 343.4 | 225.1 |
| WGNT | 27 | NTSC | Portsmouth, VA | 353.6 | 204.1 |
| WUTR | 24 | NTSC | Syracuse, NY | 370.8 | 345.0 |
| WUNI | 20 | NTSC | Utica, NY | 390.8 | 355.9 |
| WLWC | 28 | NTSC | New Bedford, MA | 400.7 | 54.1 |
| WFXT | 42 | NTSC | Boston, MA | 417.5 | 45.5 |
| WNPB | 24 | NTSC | Morgantown, WV | 420.5 | 271.1 |
| WPTT | 22 | NTSC | Pittsburgh, PA | 422.0 | 282.4 |
| WXXI | 21 | NTSC | Rochester, NY | 442.1 | 329.8 |
| WNNE | 31 | NTSC | Hartford, CT | 458.2 | 24.9 |
| WVER | 28 | NTSC | Rutland, VT | 460.0 | 17.7 |
| WNYB | 16 | NTSC | Watertown, NY | 465.3 | 351.2 |
| WNBU | 26 | NTSC | Jamestown, NY | 471.9 | 310.3 |
| WJPR | 21 | NTSC | Lynchburg, VA | 494.9 | 238.8 |
| | | | | | |
| WTVE | 25 | DTV | Reading, PA | 98.9 | 312.5 |
| WNYE | 24 | DTV | New York, NY | 134.8 | 32.4 |
| WLYH | 23 | DTV | Lancaster, PA | 150.2 | 293.8 |
| WHSI | 23 | DTV | Smithtown, NY | 205.8 | 50.5 |
| WATM | 24 | DTV | Altoona, PA | 319.7 | 288.1 |
| WTVR | 25 | DTV | Richmond, VA | 331.5 | 224.4 |
| WCVE | 24 | DTV | Richmond, VA | 343.4 | 225.1 |
| WCNY | 25 | DTV | Syracuse, NY | 370.8 | 345.0 |
| WHSH | 23 | DTV | Malborough, MA | 407.4 | 42.5 |
| KDKA | 25 | DTV | Pittsburgh, PA | 448.0 | 282.6 |
| WVTA | 24 | DTV | Windsor, VT | 457.7 | 25.0 |
| WNNE | 25 | DTV | Hartford, VT | 458.2 | 24.9 |
| | | | | | |

TABLE II PAGE 3

STATIONS WHICH RECEIVE INTERFERENCE

| | | | Population | 1990 U.S. Cens L. Rice | sus L. Rice | | | |
|------------------|-----------------|----------------------------|--------------------|-------------------------------------|--|-------|----------|-------|
| Call/ Channel | City/ State | Grade B <u>F(50,50)</u> | L. Rice Grade B | Existing Interference | With Existing & Prop. Interference | Prop | Existing | Total |
| WNJS 23 | Camden NJ | 5,966,455 | 5,940,180 | 5,793,427 | 5,793,265 | <0.1 | 2.5 | 2.5 |
| WHSW 24 | Baltimore MD | 5,715,670 | 5,488,640 | 5,162,206 | 5,150,382 | 0.20 | 6.0 | 6.2 |
| Call/ Channel | City/ State | Grade B <u>F(50,50)</u> | L. Rice Grade B | L. Rice Existing Interference | L. Rice With Existing & Prop. Interference | Prop. | Existing | Total |
| WTVE 25 (DT) | Reading PA | 4,773,196 | 3,494,609 | 3,494,609 | 3,491,437 | 0.1 | 0 | 0.1 |
| WNYE | | | 16,759,375 | 16,759,375 | 16,624,436 | 0.8 | 0 | 0.8 |

PROPAGATION SYSTEMS INC.

Relative Field Tabulation Antenna Model: PSILPD16AH/24 Gain: 40.81 (16.11 dBd)

| | Relative | | Gain |
|-------|----------|-------|-------|
| Angle | Field | Gain | dB |
| Ō | 0.242 | 2.39 | 3.78 |
| 10 | 0.237 | 2.29 | 3.60 |
| 20 | 0.242 | 2.39 | 3.78 |
| 30 | 0.302 | 3.72 | 5.71 |
| 40 | 0.432 | 7.62 | 8.82 |
| 50 | 0.600 | 14.69 | 11.67 |
| 60 | 0.764 | 23.82 | 13.77 |
| 70 | 0.889 | 32.25 | 15.09 |
| 80 | 0.967 | 38.16 | 15.82 |
| 90 | 1.000 | 40.81 | 16.11 |
| 100 | 0.974 | 38.72 | 15.88 |
| 110 | 0.897 | 32.84 | 15.16 |
| 120 | 0.781 | 24.89 | 13.96 |
| 130 | 0.622 | 15.79 | 11.98 |
| 140 | 0.451 | 8.30 | 9.19 |
| 150 | 0.324 | 4.28 | 6.32 |
| 160 | 0.258 | 2.72 | 4.34 |
| 170 | 0.248 | 2.51 | 4.00 |
| 180 | 0.256 | 2.67 | 4.27 |
| 190 | 0.248 | 2.51 | 4.00 |
| 200 | 0.258 | 2.72 | 4.34 |
| 210 | 0.324 | 4.28 | 6.32 |
| 220 | 0.451 | 8.30 | 9.19 |
| 230 | 0.622 | 15.79 | 11.98 |
| 240 | 0.781 | 24.89 | 13.96 |
| 250 | 0.897 | 32.84 | 15.16 |
| 260 | 0.974 | 38.72 | 15.88 |
| 270 | 1.000 | 40.81 | 16.11 |
| 280 | 0.967 | 38.16 | 15.82 |
| 290 | 0.889 | 32.25 | 15.09 |
| 300 | 0.764 | 23.82 | 13.77 |
| 310 | 0.600 | 14.69 | 11.67 |
| 320 | 0.432 | 7.62 | 8.82 |
| 330 | 0.302 | 3.72 | 5.71 |
| 340 | 0.242 | 2.39 | 3.78 |
| 350 | 0.237 | 2.29 | 3.60 |

Table III

PROPAGATION SYSTEMS INC.

Relative Field Tabulation Antenna Model: PSILPD16AH/24 Elevation Pattern: P61200-1A Directivity: 16.59 (12.20 dB)

Beam Tilt: -.5 Degree

| | Relative | | | | | |
|-------|----------|--|--|--|--|--|
| Angle | Field | | | | | |
| -90 | 0.000 | | | | | |
| -85 | 0.025 | | | | | |
| -80 | 0.059 | | | | | |
| -75 | 0.061 | | | | | |
| -70 | 0.052 | | | | | |
| -65 | 0.068 | | | | | |
| -60 | 0.053 | | | | | |
| -55 | 0.044 | | | | | |
| -50 | 0.042 | | | | | |
| -45 | 0.029 | | | | | |
| -40 | 0.030 | | | | | |
| -35 | 0.042 | | | | | |
| -30 | 0.000 | | | | | |
| -25 | 0.070 | | | | | |
| -20 | 0.091 | | | | | |
| -15 | 0.039 | | | | | |
| -10 | 0.150 | | | | | |
| -5 | 0.297 | | | | | |
| 0 | 0.971 | | | | | |
| 5 | 0.296 | | | | | |
| 10 | 0.114 | | | | | |
| 15 | 0.034 | | | | | |
| 20 | 0.075 | | | | | |
| 25 | 0.057 | | | | | |
| 30 | 0.000 | | | | | |

TABLE V

HAAT AND DISTANCE TO CONTOUR DATA

PROPOSED CH 24 DTV ALLOTMENT

VINELAND, NEW JERSEY

JUNE 2000

Callsign : PROP CH 24 DTV
Coordinates : 39-43-41 N, 74-50-39 W
Channel : 24

Frequency (MHz): 531.12500
HAAT (m): 243.80
Flevation (**) AMSL (m): 269.00 Tower AGL (m): 234.90 (m): 31.40Elevation

(Kw): 100ERP

City/State : VINELAND, NJ

: BPCT-960920YV/BPCT-960920LO ARN

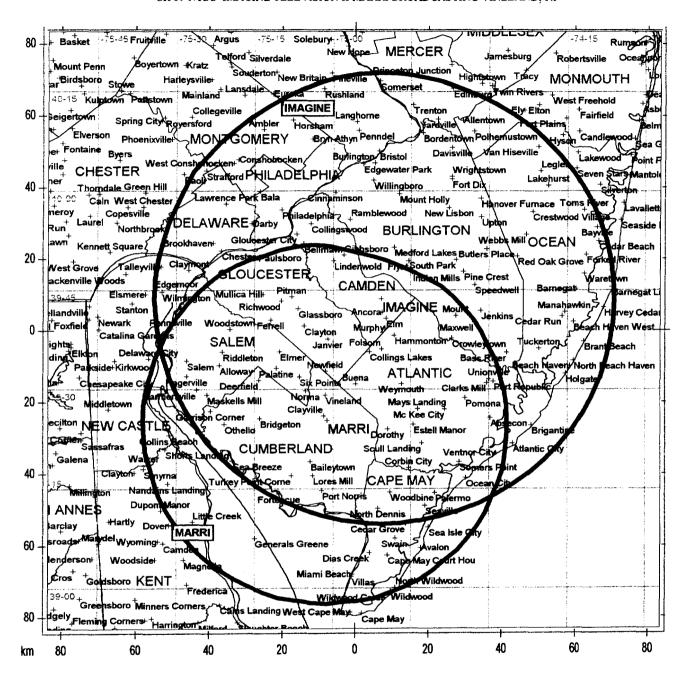
: IMAGINE TELEVISION/MARRI BROADCASTING Licensee

: F(50,90) Contour type Signal strength : 41.000 dBu

: 13964.800 sq. km Area covered

| Population covered: | | 5473 | 5473777 persons | | | | | | | | |
|---------------------|-------|------|-----------------|------|------|-----|------|------|-------------|------|------|
| | HAAT | | Bra | наат | Dist | Bra | HAAT | Dist | Brg | HAAT | Dist |
| ьгд | IIAAI | DISC | - | | | | | | | | |
| 0 | 247 | 67.2 | 90 | 256 | 67.8 | 180 | 246 | 67.6 | 270 | 232 | 66.6 |
| 5 | 247 | 65.4 | 95 | 256 | 69.4 | 185 | 244 | 65.7 | 275 | 231 | 68.0 |
| 10 | 245 | 63.6 | 100 | 256 | 70.7 | 190 | 244 | 64.1 | 280 | 231 | 69.3 |
| 15 | 244 | 61.5 | 105 | 256 | 71.9 | 195 | 244 | 62.3 | 285 | 227 | 70.1 |
| 20 | 241 | 60.2 | 110 | 257 | 72.8 | 200 | 243 | 61.1 | 290 | 227 | 70.8 |
| 25 | 243 | 59.2 | 115 | 256 | 73.5 | 205 | 241 | 59.7 | 295 | 227 | 71.5 |
| 30 | 243 | 59.0 | 120 | 256 | 73.9 | 210 | 241 | 59.5 | 300 | 229 | 72.1 |
| 35 | 245 | 59.1 | 125 | 255 | 74.3 | 215 | 241 | 59.3 | 305 | 235 | 72.9 |
| 40 | 243 | 59.3 | 130 | 253 | 74.3 | 220 | 240 | 59.4 | 310 | 231 | 72.8 |
| 45 | 247 | 59.4 | 135 | 252 | 74.4 | 225 | 238 | 59.5 | 315 | 231 | 72.9 |
| | 247 | 59.3 | 140 | 251 | 74.2 | 230 | 237 | 59.2 | 320 | 228 | 72.5 |
| 50 55 | 247 | 59.3 | 145 | 249 | 73.9 | 235 | 233 | 58.8 | 325 | 230 | 72.5 |
| | 252 | 59.6 | 150 | 248 | 73.4 | 240 | 231 | 58.9 | 330 | 230 | 72.0 |
| 60 | | 59.8 | 155 | 248 | 73.0 | 245 | 231 | 59.1 | 335 | 234 | 71.9 |
| 65 | 254 | | 160 | 247 | 72.2 | 250 | | 60.3 | 340 | 238 | 71.4 |
| 70 | 255 | 61.1 | | | 71.4 | 255 | | 61.4 | 345 | 242 | 70.9 |
| 75 | 256 | 62.3 | 165 | 245 | | 260 | 230 | | 350 | | 70.0 |
| 80 | 256 | 64.3 | 170 | 244 | 70.2 | | | | | 247 | 68.8 |
| 85 | 256 | 66.0 | 175 | 246 | 69.1 | 265 | 230 | 64.7 | 35 5 | 241 | 00.0 |

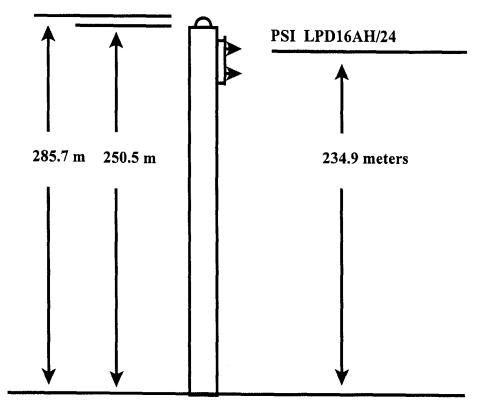
CH 59 NTSC IMAGINE TELEVISION & MARRI BROADCASTING VINELAND, NJ



Communications Technologies, Inc. Marlton, New Jersey 08053

County Borders State Borders Lat/Lon Grid

N.L. 39° 43' 41" W.L. 74° 50' 39" NAD 27 FCC Reg. #1045125



GROUND LEVEL 34.1 meters AMSL

OTHER ANTENNAS ON STRUCTURE NOT SHOWN NOT TO SCALE

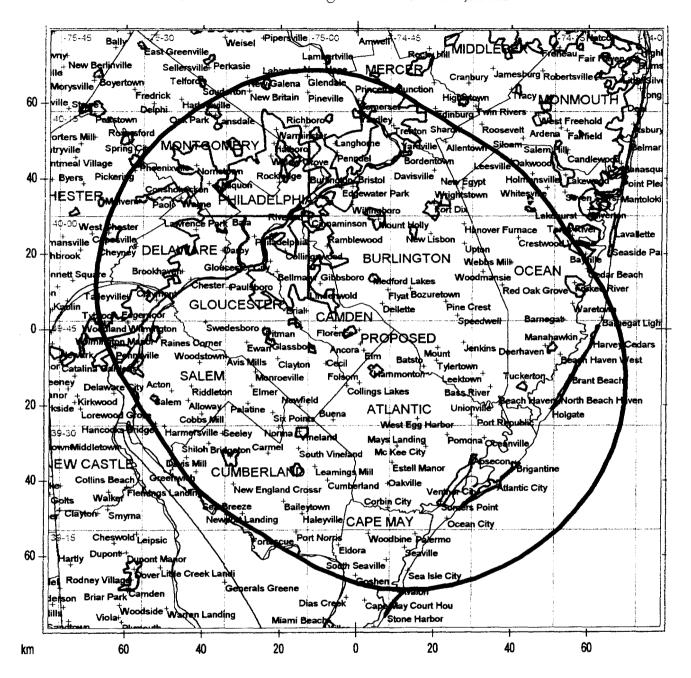
FIGURE 2

VERTICAL PLAN SKETCH

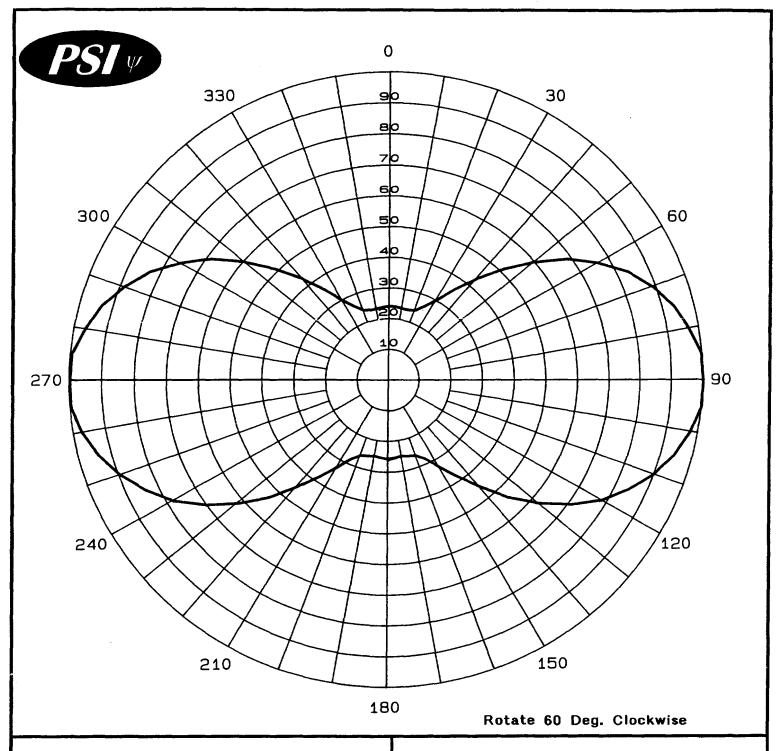
PROPOSED CH 24 DTV VINELAND, NEW JERSEY

Communications Technologies, Inc. Marlton, New Jersey June 2000

CH 24 DTV 100 kW MAX DA @ 244 M HAAT VINELAND, NEW JERSEY



Communications Technologies, Inc. Marlton, New Jersey 08053

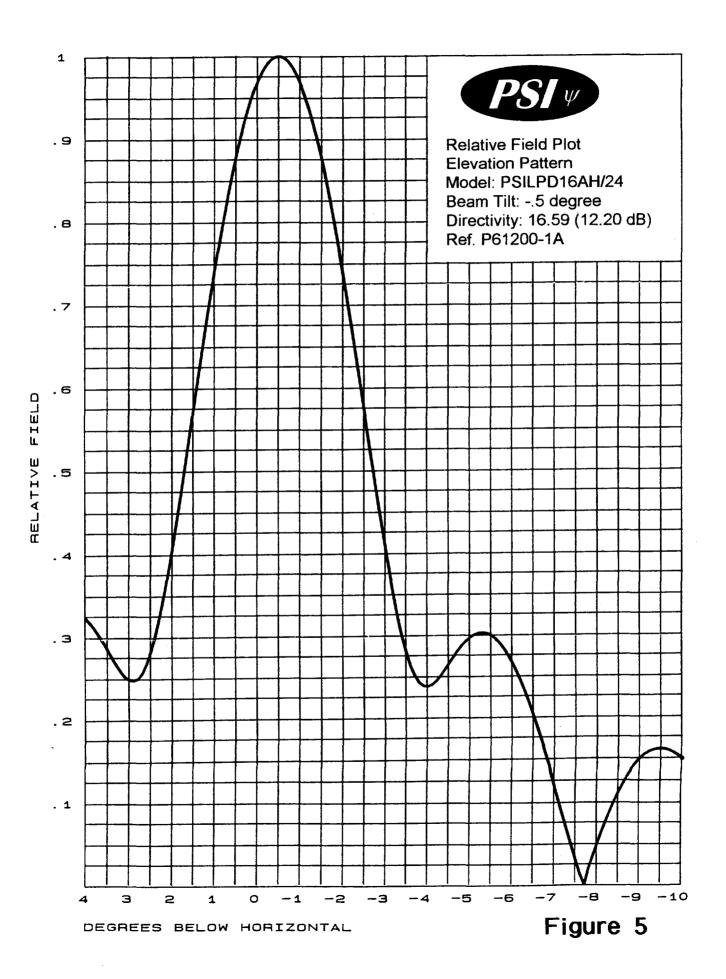


Calculated Relative Field Azimuth Plane Pattern

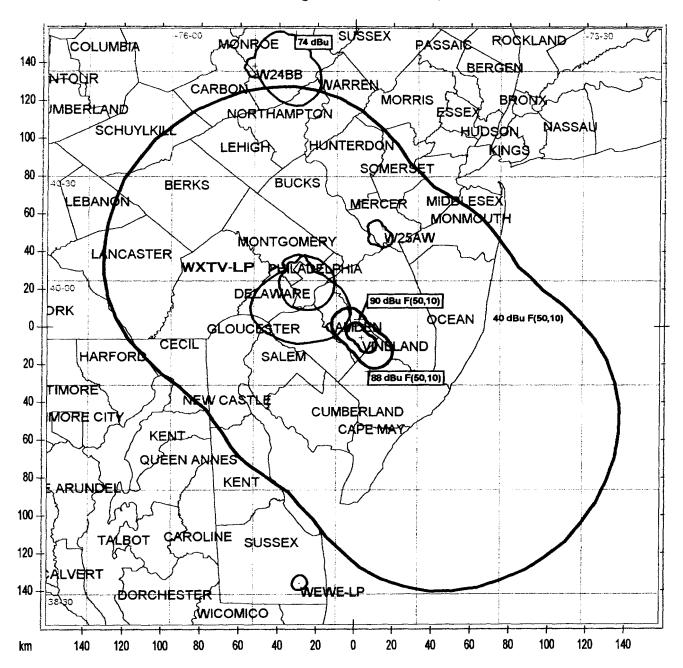
Antenna: PSILPD16AH/24
Type: 16-Bay Digital Slot
Directivity: 2.46 (3.91 dB)
Peak Gain: 40.81 (16.11 dB)

Channel: 24 Ref. P61200-1B Propagation Systems Inc. PO Box 113 Ebensburg, PA 15931

Figure 4

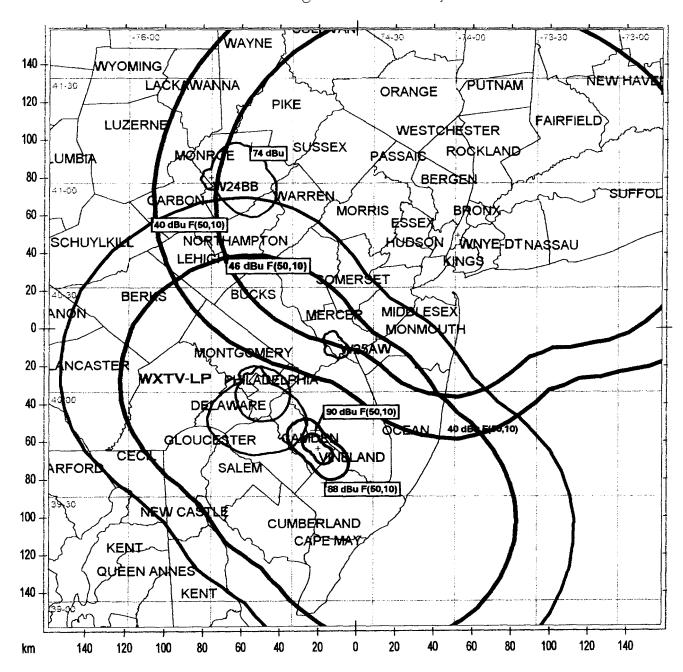


CH 24 DTV 100 kW @ 244 M HAAT VINELAND, NEW JERSEY



Communications Technologies, Inc. Marlton, New Jersey 08053

CH 24 DTV 100 kW @ 244 M HAAT VINELAND, NEW JERSEY



Communications Technologies, Inc. Marlton, New Jersey 08053